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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,168	04/08/2004	David M. Lerner	P18645	2933

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EXAMINER	
PATEL, HARESH N	

ART UNIT	PAPER NUMBER
2154	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/822,168	LERNER ET AL.	
	Examiner	Art Unit	
	HARESH N. PATEL	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) *24-36* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/8/04, 9/3/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-23 are subject to examination. Claims 24-36 are withdrawn.

Election/Restrictions

2. Applicant's election without traverse of Group I invention, claims 1-23 in the reply filed on 6/10/08 is acknowledged.

Drawings

3. The figures submitted on the filing date of this application are acknowledged.

Information Disclosure Statement

4. An initialed and dated copy of the applicant's IDS form 1449, is attached to the instant Office action, please see attachments section of the attached form PTO-326 containing paper dates.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Soltis et al. 7,360,072 (Hereinafter Soltis-Cisco).

7. Referring to claim 1, Soltis-Cisco discloses a machine-implemented method comprising: loading a bus-to-network device driver during a machine boot (e.g., col., 2), the bus-to-network device driver capable of distinguishing between received responses to machine bus commands and other network traffic corresponding to a network driver (e.g., col., 2).

8. Referring to claim 2, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses the bus-to-network device driver further capable of sending machine bus commands over a network and providing access to the network for the network driver (e.g., col., 3), and wherein said loading the bus-to-network device driver occurs in response to an operating system load of bus drivers (e.g., col., 3).

9. Referring to claim 3, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the bus-to-network device driver comprises an iSCSI driver, and the operating system load of bus drivers comprises the operating system load of SCSI drivers (e.g., col., 3).

10. Referring to claim 4, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein said loading the bus- to-network device driver comprises: loading a first bus-to-network driver that controls a network device (e.g., col., 4); and loading a

second bus-to-network driver that encapsulates the machine bus commands, includes a network stack and interfaces with a network through the first bus-to-network driver (e.g., col., 4).

11. Referring to claim 5, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses loading the network driver capable of communicating with a network through the bus-to-network device driver (e.g., col., 3).

12. Referring to claim 6, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses disabling the network driver, said disabling cutting off general purpose network traffic but having no effect on the bus-to-network device driver's sending of the machine bus commands (e.g., col., 2).

13. Referring to claim 7, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses engaging the bus-to-network device driver to perform block storage of data to a storage target over the network using a connectionless packet-switched communication protocol (e.g., col., 2); and engaging the network driver to direct general purpose network traffic over the network (e.g., col., 2).

14. Referring to claim 8, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the general purpose network traffic comprises TCP/IP traffic (e.g., col., 2).

15. Referring to claim 9, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the bus-to-network device driver distinguishes between the received responses based on hardware addresses (e.g., col., 3).

16. Referring to claim 10, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the hardware addresses comprise MAC addresses (e.g., col., 3).

17. Referring to claim 11, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses receiving the bus-to-network device driver over a network (e.g., col., 2).

18. Referring to claim 12, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses installing an operating system to a storage target (e.g., col., 2); and booting the operating system from the storage target, said loading occurring during said booting (e.g., col., 2).

19. Referring to claim 13, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the bus-to-network device driver comprises a portion of a boot loader (e.g., col., 4).

20. Referring to claim 14, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein said loading comprises loading the bus-to-network device driver during multiple machine boots of multiple data processing machines (e.g., col., 4).

21. Referring to claim 15, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the multiple data processing machines comprise at least one modular platform (e.g., col., 2).

22. Referring to claim 16, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses an apparatus comprising: a network device (e.g., col., 2); a device driver that operates the network device and supports booting to a remote boot device (e.g., col., 2); and a network driver that communicates with the network device through the device driver (e.g., col., 2), presents itself to an operating system as a network device driver that operates the network device (e.g., col., 2), and supports general purpose network traffic (e.g., col., 3).

23. Referring to claim 17, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the device driver comprises a bus-to-network driver loaded during booting in response to an operating system load of bus drivers (e.g., col., 3).

24. Referring to claim 18, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the device driver further comprises a hardware driver that operates the network device (e.g., col., 3), and the bus-to-network driver communicates with the

network device through the hardware driver and presents itself as a bus driver to the operating system (e.g., col., 3).

25. Referring to claim 19, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the bus-to-network driver comprises an iSCSI driver that presents itself as a SCSI driver to the operating system (e.g., col., 2).

26. Referring to claim 20, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the hardware driver discriminates between iSCSI traffic and the general purpose network traffic based on hardware addresses (e.g., col., 2).

27. Referring to claim 21, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the hardware addresses comprise MAC addresses (e.g., col., 2).

28. Referring to claim 22, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the network device comprises a network interface card (e.g., col., 2).

29. Referring to claim 23, Soltis-Cisco discloses the claimed limitations as rejected above. Soltis-Cisco also discloses wherein the device driver comprises a portion of code tangibly embodied in an option ROM of the network interface card (e.g., col., 4).

30. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Obara et al. 7,155,492 (Hereinafter Obara-Hitachi).

31. Referring to claim 1, Obara-Hitachi discloses a machine-implemented method comprising: loading a bus-to-network device driver during a machine boot (e.g., col., 5), the bus-to-network device driver capable of distinguishing between received responses to machine bus commands and other network traffic corresponding to a network driver (e.g., col., 5).

32. Referring to claim 2, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses the bus-to-network device driver further capable of sending machine bus commands over a network and providing access to the network for the network driver (e.g., col., 6), and wherein said loading the bus-to-network device driver occurs in response to an operating system load of bus drivers (e.g., col., 6).

33. Referring to claim 3, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the bus-to-network device driver comprises an iSCSI driver, and the operating system load of bus drivers comprises the operating system load of SCSI drivers (e.g., col., 6).

34. Referring to claim 4, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein said loading the bus- to-network device driver comprises: loading a first bus-to-network driver that controls a network device (e.g., col., 7); and loading a

second bus-to-network driver that encapsulates the machine bus commands, includes a network stack and interfaces with a network through the first bus-to-network driver (e.g., col., 7).

35. Referring to claim 5, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses loading the network driver capable of communicating with a network through the bus-to-network device driver (e.g., col., 6).

36. Referring to claim 6, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses disabling the network driver, said disabling cutting off general purpose network traffic but having no effect on the bus-to-network device driver's sending of the machine bus commands (e.g., col., 5).

37. Referring to claim 7, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses engaging the bus-to-network device driver to perform block storage of data to a storage target over the network using a connectionless packet-switched communication protocol (e.g., col., 5); and engaging the network driver to direct general purpose network traffic over the network (e.g., col., 5).

38. Referring to claim 8, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the general purpose network traffic comprises TCP/IP traffic (e.g., col., 5).

39. Referring to claim 9, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the bus-to-network device driver distinguishes between the received responses based on hardware addresses (e.g., col., 6).

40. Referring to claim 10, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the hardware addresses comprise MAC addresses (e.g., col., 6).

41. Referring to claim 11, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses receiving the bus-to-network device driver over a network (e.g., col., 5).

42. Referring to claim 12, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses installing an operating system to a storage target (e.g., col., 5); and booting the operating system from the storage target, said loading occurring during said booting (e.g., col., 5).

43. Referring to claim 13, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the bus-to-network device driver comprises a portion of a boot loader (e.g., col., 7).

44. Referring to claim 14, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein said loading comprises loading the bus-to-network device driver during multiple machine boots of multiple data processing machines (e.g., col., 7).

45. Referring to claim 15, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the multiple data processing machines comprise at least one modular platform (e.g., col., 5).

46. Referring to claim 16, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses an apparatus comprising: a network device (e.g., col., 5); a device driver that operates the network device and supports booting to a remote boot device (e.g., col., 5); and a network driver that communicates with the network device through the device driver (e.g., col., 5), presents itself to an operating system as a network device driver that operates the network device (e.g., col., 5), and supports general purpose network traffic (e.g., col., 6).

47. Referring to claim 17, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the device driver comprises a bus-to-network driver loaded during booting in response to an operating system load of bus drivers (e.g., col., 6).

48. Referring to claim 18, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the device driver further comprises a hardware driver that operates the network device (e.g., col., 6), and the bus-to-network driver communicates with the

network device through the hardware driver and presents itself as a bus driver to the operating system (e.g., col., 6).

49. Referring to claim 19, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the bus-to-network driver comprises an iSCSI driver that presents itself as a SCSI driver to the operating system (e.g., col., 5).

50. Referring to claim 20, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the hardware driver discriminates between iSCSI traffic and the general purpose network traffic based on hardware addresses (e.g., col., 5).

51. Referring to claim 21, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the hardware addresses comprise MAC addresses (e.g., col., 5).

52. Referring to claim 22, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the network device comprises a network interface card (e.g., col., 5).

53. Referring to claim 23, Obara-Hitachi discloses the claimed limitations as rejected above. Obara-Hitachi also discloses wherein the device driver comprises a portion of code tangibly embodied in an option ROM of the network interface card (e.g., col., 7).

54. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Cauthron et al. 2005/0138346 (Hereinafter Cauthron).

55. Referring to claim 1, Cauthron discloses a machine-implemented method comprising: loading a bus-to-network device driver during a machine boot (e.g., page 2), the bus-to-network device driver capable of distinguishing between received responses to machine bus commands and other network traffic corresponding to a network driver (e.g., page 2).

56. Referring to claim 2, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses the bus-to-network device driver further capable of sending machine bus commands over a network and providing access to the network for the network driver (e.g., page 3), and wherein said loading the bus-to-network device driver occurs in response to an operating system load of bus drivers (e.g., page 3).

57. Referring to claim 3, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the bus-to-network device driver comprises an iSCSI driver, and the operating system load of bus drivers comprises the operating system load of SCSI drivers (e.g., page 3).

58. Referring to claim 4, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein said loading the bus- to-network device driver comprises: loading a first bus-to-network driver that controls a network device (e.g., page 4); and loading a

second bus-to-network driver that encapsulates the machine bus commands, includes a network stack and interfaces with a network through the first bus-to-network driver (e.g., page 4).

59. Referring to claim 5, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses loading the network driver capable of communicating with a network through the bus-to-network device driver (e.g., page 3).

60. Referring to claim 6, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses disabling the network driver, said disabling cutting off general purpose network traffic but having no effect on the bus-to-network device driver's sending of the machine bus commands (e.g., page 2).

61. Referring to claim 7, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses engaging the bus-to-network device driver to perform block storage of data to a storage target over the network using a connectionless packet-switched communication protocol (e.g., page 2); and engaging the network driver to direct general purpose network traffic over the network (e.g., page 2).

62. Referring to claim 8, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the general purpose network traffic comprises TCP/IP traffic (e.g., page 2).

63. Referring to claim 9, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the bus-to-network device driver distinguishes between the received responses based on hardware addresses (e.g., page 3).

64. Referring to claim 10, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the hardware addresses comprise MAC addresses (e.g., page 3).

65. Referring to claim 11, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses receiving the bus-to-network device driver over a network (e.g., page 2).

66. Referring to claim 12, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses installing an operating system to a storage target (e.g., page 2); and booting the operating system from the storage target, said loading occurring during said booting (e.g., page 2).

67. Referring to claim 13, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the bus-to-network device driver comprises a portion of a boot loader (e.g., page 4).

68. Referring to claim 14, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein said loading comprises loading the bus-to-network device driver during multiple machine boots of multiple data processing machines (e.g., page 4).

69. Referring to claim 15, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the multiple data processing machines comprise at least one modular platform (e.g., page 2).

70. Referring to claim 16, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses an apparatus comprising: a network device (e.g., page 2); a device driver that operates the network device and supports booting to a remote boot device (e.g., page 2); and a network driver that communicates with the network device through the device driver (e.g., page 2), presents itself to an operating system as a network device driver that operates the network device (e.g., page 2), and supports general purpose network traffic (e.g., page 3).

71. Referring to claim 17, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the device driver comprises a bus-to-network driver loaded during booting in response to an operating system load of bus drivers (e.g., page 3).

72. Referring to claim 18, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the device driver further comprises a hardware driver that operates the network device (e.g., page 3), and the bus-to-network driver communicates with the network device through the hardware driver and presents itself as a bus driver to the operating system (e.g., page 3).

73. Referring to claim 19, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the bus-to-network driver comprises an iSCSI driver that presents itself as a SCSI driver to the operating system (e.g., page 2).

74. Referring to claim 20, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the hardware driver discriminates between iSCSI traffic and the general purpose network traffic based on hardware addresses (e.g., page 2).

75. Referring to claim 21, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the hardware addresses comprise MAC addresses (e.g., page 2).

76. Referring to claim 22, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the network device comprises a network interface card (e.g., page 2).

77. Referring to claim 23, Cauthron discloses the claimed limitations as rejected above. Cauthron also discloses wherein the device driver comprises a portion of code tangibly embodied in an option ROM of the network interface card (e.g., page 4).

Conclusion

In order to expedite the prosecution of this case, multiple references are used for the rejections to demonstrate that several references disclose the claimed subject matter of the

claims. The PTO-Form arts 7,177,913 and 2004/0111537 belong to the same assignee but different inventors and is pertinent to the claimed subject matter of the claims. See pages 1-2 of 2004/0111537 and col., 2-5 of 7,177,913 regarding the claimed subject matter.

Examiner has cited particular columns and line numbers and/or paragraphs and/or sections and/or page numbers in the reference(s) as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety, as potentially teaching, all or part of the claimed invention, as well as the context of the passage, as taught by the prior art or disclosed by the Examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (571) 272-3973. The examiner can normally be reached on Monday, Tuesday, Thursday and Friday from 10:00 am to 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached at (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Haresh N. Patel/

Primary Examiner, Art Unit 2154

08/30/08